Chroma-Q™

Color Block™ PSU-30

User Manual

Chroma-Q™
BRILLIANT SOLUTIONS

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PN: 602-0503

Warranty Statement

Chroma-Q warrants to the original purchaser, with proof of purchase, that its delivered products shall be free from defects in material and workmanship under normal use for a period of 12 months from date of shipment.

Chroma-Q will repair, or at its option, provide an equivalent item or replace, the defective product during the stated warranty period. This warranty applies only to the repair or replacement of the product and only when the product is properly handled, installed and maintained according to Chroma-Q instructions. This warranty excludes defects resulting from improper handling, storage, installation, acts of God, fire, vandalism or civil disturbances. Purchaser must notify Chroma-Q in writing within 14 days of noticing the defect. This warranty excludes field labour or service charges related to the repair or replacement of the product.

The warranty contained herein shall not extend to any finished goods or spare parts from which any serial number has been removed or which have been damaged or rendered defective (a) as a result of normal wear and tear, willful or accidental damage, negligence, misuse or abuse; (b) due to water or moisture, lightning, windstorm, abnormal voltage, harmonic distortion, dust, dirt, corrosion or other external causes; (c) by operation outside the specifications contained in the user documentation; (d) by the use of spare parts not manufactured or sold by Chroma-Q or by the connection or integration of other equipment or software not approved by Chroma-Q unless the Customer provides acceptable proof to Chroma-Q that the defect or damage was not caused by the above; (e) by modification, repair or service by anyone other than Chroma-Q, who has not applied for and been approved by Chroma-Q to do such modification, repair or service unless the Customer provides acceptable proof to Chroma-Q that the defect or damage was not caused by the above; (f) due to procedures, deviating from procedures specified by Chroma-Q or (g) due to failure to store, install, test, commission, maintain, operate or use finished goods and spare parts in a safe and reasonable manner and in accordance with Chroma-Q's instructions (h) by repair or replacement of engines without factory training.

The warranty contained herein shall not apply to finished goods or spare parts which are sold "as is", as "second-hand", as used", as "demo" or under similar qualifications or to Consumables ("Consumables" is defined as any part(s) of goods or part(s) for use with goods, which part(s) of goods or part(s) for use with goods are consumed during the operation of the goods and which part(s) of goods or part(s) for use with goods require replacement from time to time by a user such as, but not limited to, light bulbs).

The warranty contained herein shall not apply, unless the total purchase price for the defective finished goods or spare parts has been paid by the due date for payment.

The warranty contained herein applies only to the original purchaser and are not assignable or transferable to any subsequent purchaser or end-user.

This warranty is subject to the shipment of the goods, within the warranty period, to the ChromaQ warranty returns department, by the purchaser, at the purchasers expense. If no fault is found, ChromaQ will charge the purchaser for the subsequent return of the goods.

Chroma-Q reserves the right to change the warranty period without prior notice and without incurring obligation and expressly disclaims all warranties not stated in this limited warranty.

Disclaimer

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that Chroma-Q products are safe, effective, and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent. Chroma-Q sole warranty is that the product will meet the sales specifications in effect at the time of shipment. Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.

Chroma-Q reserves the right to change or make alteration to devices and their functionality without notice due to our on going research and development.

The Color Block PSU-30 has been designed specifically for the professional entertainment lighting industry. Regular maintenance should be performed to ensure that the products perform well in the entertainment environment.

If you experience any difficulties with any Chroma-Q products please contact your selling dealer. If your selling dealer is unable to help please contact support@chroma-q.com. If the selling dealer is unable to satisfy your servicing needs, please contact the following, for full factory service:

Outside North America:
Tel: +44 (0)1494 446000
Fax: +44 (0)1494 461024
support@chroma-q.com

North America:
Tel: 416-255-9494
Fax: 416-255-3514
support@chroma-q.com

For further information please visit the Chroma-Q website at www.chroma-q.com.

Chroma-Q is a trademark, for more information on this visit www.chroma-q.com/trademarks.

The rights and ownership of all trademarks are recognised.

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1. Product overview

1.1 Color Block PSU-30

The Color Block PSU-30 is a 2U 19" rack mounted power supply suitable for up to 30 Color Block DB4 LED Fixtures or 30 Color Block 2 LED Fixtures. It can be controlled remotely via ANSI E1.11 USITT DMX 512-A in a variety of modes to accommodate most applications or can operate independently as a standalone system.

The Color Block PSU-30 delivers power and data via six XLR4 outputs. A maximum of five daisy-chained Color Block DB4 or Color Block 2 fixtures can be connected to each XLR4 output. Return lines are not required. The total cable length of each chain must not exceed 60m/200ft. The total cable length of each chain must not exceed 60m/200ft. Two in/out ethernet RJ45 connectors are available for synchronisation.

1.2 Color Block Fixtures

Color Block DB4

For the purpose of clarification, the Color Block DB4 unit (picture below) is known as a Fixture. Each Color Block DB4 Fixture contains 4 Cells, with each Cell comprising of 3 LEDs.

Color Block 2

The Color Block 2 unit (picture below) is known as a Fixture. Each Color Block 2 Fixture contains four cells, with each cell comprising of 3 single optic RGBA LED clusters.

Note: To ensure proper functionality, Date/Time must be set before operation. Look Store will function when Date/Time are set. Time is reset when battery is replaced or when the PSU-30 is reset.

2. Operation

2.1 Cabling
2.2 Control
- a. Control menu
- b. DMX personality mode 1-3
- c. DMX personality mode 4-6
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2.3 Technical information
- a. Specifications
- b. Maintenance
- c. Battery replacement
- d. Installation
- e. Wiring

2.1 Cabling

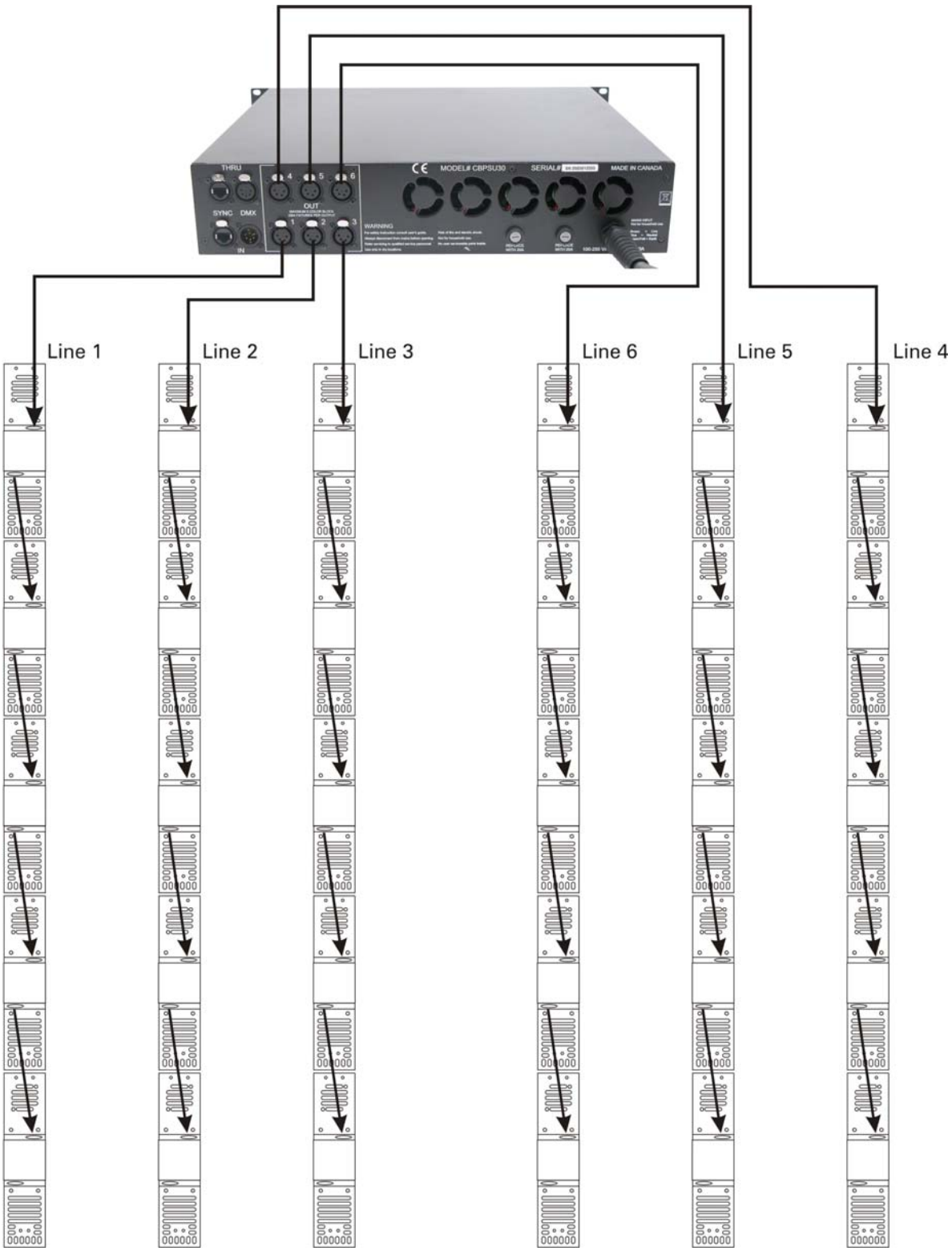
The Color Block system utilises an XLR4 cable system. This is used to supply power and control data. Pin 1 = 0VDC, pin 2 = control minus, pin 3 = control plus, pin 4 = +48VDC. The chassis should be ground bonded.

Only genuine Tourflex Datasafe cable is recommended for use with the Color Block system. Damage will occur if power connections short-circuit to data or ground shield connections.
When assembling XLR4 cables, heat shrink should be used on each individual data pin and the drain wire to prevent short circuits.

A maximum of five daisy-chained Color Block DB4 or Color Block 2 fixtures can be connected to each XLR4 output. Return lines are not required. The total cable length of each chain must not exceed 60m/200ft.

It is recommended that a maximum of 20m XLR4 cable length should separate adjacent fixture units as to avoid signal deterioration.

Note: Due to the higher levels of leakage current of the PSU-30 it is important that the XLR4 cables used are manufactured only to the specification detailed above. It is also important that the cables are not coupled or uncoupled whilst the PSU is powered and that the PSU is correctly grounded.


THRU
SYNC
DMX
IN
OUT
4
5
6
1
2
3
MODEL# CBPSU30
SERIAL#
MADE IN CANADA
WARNING
Line 1
Line 2
Line 3
Line 6
Line 5
Line 4

2.2 Control

The Color Block PSU-30 menu items are accessed via the LCD display and the following controls:

- Right hand button (red) = Enter (hold for seconds to save)
- Left hand button (blue) = Exit without saving
- Wheel = Adjusts values or scrolls through menu items

The LCD screen shown is currently at the **Home** position. The **Home** position displays; product name, current DMX Address, current Control Mode and Time.

If left unadjusted at a main menu position for 5 seconds the LCD screen will revert to the **Home** position.

a. Control menu

Use the wheel to scroll through the control menu positions:

→ **Home / DMX Address**

To set the DMX start address of the PSU-30, press Enter, scroll wheel to adjust DMX start address, press Enter for 2 seconds to save settings.

→ **Control Mode**

The PSU-30 can be set to operate in 10 DMX controlled modes for the Color Block DB4 system (CB1) and 16 DMX controlled modes for the Color Block 2 system (CB2). Go to "System" and select either "CB1" or "CB2". Both systems offer 3 grouping options (single-cell, block-grouped, all-grouped) with 5 control options: HSIFX, HSI, RGBA, RGB (with *Magic Amber), RGBI (with *Magic Amber), pre-programmed looks and standalone effects. See list below for details. Press Enter, scroll wheel to select control mode, and press Enter for 2 seconds to save control mode settings.

Mode	Ch	Group	System: CB1	System: CB2
1	367	Variable	7FX + 120 x HSI	7FX + 120 x HSI
2	360	Cell	120 x HSI	120 x HSI
3	360	Cell	120 x RGB (with *Magic Amber)	120 x RGB (with *Magic Amber)
4	96	Block	6FX + 30 x HSI	6FX + 30 x HSI
5	90	Block	30 x HSI	30 x HSI
6	90	Block	30 x RGB (with *Magic Amber)	30 x RGB (with *Magic Amber)
7	9	All	6FX + HSI	6FX + HSI
8	3	All	HSI	HSI
9	3	All	RGB (with *Magic Amber)	RGB (with *Magic Amber)
10	480	Cell	Not Available	120 x RGBA
11	480	Cell	Not Available	120 x RGBI (with *Magic Amber)
12	120	Block	Not Available	30 x RGBA
13	120	Block	Not Available	30 x RGBI (with *Magic Amber)
14	4	All	Not Available	RGBA
15	4	All	Not Available	RGBI (with *Magic Amber)
16	1	Any	Look Select	Look Select

→ **When DMX is Lost**

If DMX is not detected various output options can be selected: Press Enter, scroll wheel to selection, press Enter for 2 seconds to save settings.

Off - will snap to off

Hold - will hold the last valid DMX state

Trig - will default to **Time Trigger** operation

Look 1-31 will snap to the **Look** of your choice

→ Look Store

The PSU-30 has 31 internal preset FX Looks for standalone operation, 1-23 are pre-programmed. To replay a Look in standalone operation, scroll to Look Store, press Enter, scroll and select the desired Look and press Enter for 2 seconds to save settings. To replay a Look with a DMX console, scroll to Control Mode 16 and press Enter for 2 seconds. Use the DMX console with the assigned channel to playback the various looks stored. (1-31 looks in 1 single channel)

Note: DMX has priority over internal Looks.

Looks can be recorded to the internal flash memory by users and will be preserved on power down. However, looks will be returned to default setting if menu 8 Reset is performed. There are two ways to record a look:

Simple, with DMX console.

Set the PSU-30 to the desired Control Mode. Use a DMX console to adjust channel levels and create the desired look or effect. Scroll to Look Store and press Enter, scroll to desired Look number and press Enter. Press Enter again for 2 seconds to save Look.

Advanced, standalone. (DMX is unplugged)

Scroll to Look Store and press Enter, scroll to desired Look and press Enter to access the memory data. The data is presented as two numbers separated by a letter “c”. The number to the left of the c is the channel number and to the right is the channel level. Scrolling to the far end of the wheel will show the Mode at which the selected Look was programmed.

To edit the Mode of a selected Look:

Scroll to Look Store and press Enter, scroll to desired Look and press Enter to access the memory data. Scroll the wheel to the far end until Mode number is shown and press Enter. Scroll wheel to adjust the Mode number. Press Enter to toggle back to the channel numbers.

To edit the channel numbers and levels of a selected Look:

Scroll to Look Store and press Enter, scroll to desired Look and press Enter to access the memory data. Scroll the wheel to select the channel number. To edit the channel level, press Enter and use the scroll wheel to adjust the level (shown as 0-255). Press Enter to toggle back to the channel number. When the desired effect is created press Enter for 2 seconds to save Look.

→ Time Triggers

The PSU-30 has real time triggering of the internal Looks. Press Enter and scroll to desired Time Trigger and press Enter. Press Enter to toggle between Day, Hour (24), Minutes and Look to be triggered, adjusting the setting with the scroll wheel as desired. Press Enter for 2 seconds to save settings. By default Time Triggers will occur on all 7 days unless specified. The triggers will only be activated when the feature “When DMX is Lost” is set to Trig.

→ Set Day and Time

Press Enter to toggle between Day, Hour (24) and Minutes, adjusting the setting with the scroll wheel as desired. When the Day and Time is set correctly press Enter for 2 seconds to save settings.

→ Display Backlight (Displ. Backlight)

The LED display can be set to go off after 5 seconds of no activity. Press Enter, scroll wheel to On (permanently) or Off (after 5 seconds) and press Enter for 2 seconds to save settings.

→ Reset to Default

Press Enter for 2 seconds to reset all menu items to factory defaults:

DMX address = 001, Control Mode = 1 (67 channels HSI+FX), DMX Lost = Hold, Looks = default, Display = On, Frequency = 360, System = CB2

→ System

The PSU-30 can be set to operate for the Color Block DB4 system (CB1) and the Color Block 2 system (CB2). Press Enter, scroll wheel to select CB1 or CB2, press Enter for 2 seconds to save settings.

→ Frequency

The PSU-30 has four frequency settings available - 360, 600, 1200, 2400. This allows for the LED scan rate to be synchronised with the video camera and avoid a flickering effect. Press Enter, scroll wheel to select frequency, press Enter for 2 seconds to save settings.

→ Sync Mode

In normal operation internally generated FX should stay synchronised between PSU-30's for approx 30 minutes. If better synchronisation is required a timing signal can be run via a RJ45 patch (not crossover) cable between PSU-30's. In order for this to work correctly one PSU-30 must be designated as the Master and all the others must be set to Slave.

Press Enter and use the scroll wheel to select Master or Slave. Press Enter for 2 seconds to save setting.

b. DMX personality mode 1-3

	In mode 1 grouping is variable & in modes 2 -3 each cell is a group		
PSU-30 (v2.2)	Mode 1 (367ch) 7FX + 120 x HSI	Mode 2 (360ch) 120 x HSI	Mode 3 (360ch) 120 x RGB (with *Magic Amber)
Channel 1	Grouping 0-100 Variable grouping range between 1-120 cells with FX running within the group. 102-206 variable grouping range between 1-120 cells with FX running between the groups. 209-255 Variable grouping range for every 2nd to every 120th cells in a group.	Hue for group 1	Red for group 1
Channel 2	Colour Speed 0-255 Variable speed of colour scrolling. From static at 0 to maximum at 255.	Saturation for group 1	Green for group 1
Channel 3	Colour Fan 0-255 Variable fan of colour between / within groups. All units are the same colour at 0.	Intensity for group 1	Blue for group 1
Channel 4	Colour Range 0 Full spectrum 1-255 Variable limit of spectrum for colour scrolling. Single colour at 1, full spectrum at 255.	Hue for group 2	Red for group 2
Channel 5	Colour Step 0-255 Variable control of smoothness of colour scrolling. Smoothest is at 0. Most coarse is at 250. Rate will vary with scrolling speed. 255 will override effects and switch to RGB.	Saturation for group 2	Green for group 2
Channel 6	Intensity Effects 0 Static 1-63 Fade on, fade off. Variable range, 63 the fastest 64-127 Fade on, snap off. Variable range, 127 the fastest 128-191 Snap on, fade off. Variable range, 191 the fastest. 192-255 Snap on, snap off (strobe). Variable range, 255 the fastest.	Intensity for group 2	Blue for group 2
Channel 7	Intensity Fan 0-255 Variable fan of intensity effect between / within groups. All units at the same intensity at 0. Alternating units on and	Hue for group 3	Red for group 3

	off at 255.		
Channel 8	Hue for group 1	Saturation for group 3	Green for group 3
Channel 9	Saturation for group 1	Intensity for group 3	Blue for group 3
Channel 10	Intensity for group 1	Hue for group 4	Red for group 4
Channel 11	Hue for group 2	Saturation for group 4	Green for group 4
Channel 12	Saturation for group 2	Intensity for group 4	Blue for group 4
Channel 13	Intensity for group 2	Hue for group 5	Red for group 5
	...and so on up to group 120		
Total DMX channels	367 DMX channels	360 DMX channels	360 DMX channels

c. DMX personality mode 4-6

	In modes 4-6 each Color Block DB4 or Color Block 2 fixture (4 cells) is a group		
PSU-30 (v2.2)	Mode 4 (96ch) 6FX + 30 x HSI	Mode 5 (90ch) 30 x HSI	Mode 6 (90ch) 30 x RGB (with *Magic Amber)
Channel 1	Colour Speed 0-255 Variable speed of colour scrolling. From static at 0 to maximum at 255.	Hue for group 1	Red for group 1
Channel 2	Colour Fan 0-255 Variable fan of colour between groups. All units are the same colour at 0.	Saturation for group 1	Green for group 1
Channel 3	Colour Range 0 Full spectrum 1-255 Variable limit of spectrum for colour scrolling. Single colour at 1, full spectrum at 255.	Intensity for group 1	Blue for group 1
Channel 4	Colour Step 0-255 Variable control of smoothness of colour scrolling. Smoothest is at 0. Most coarse is at 250. Rate will vary with scrolling speed. 255 will override effects and switch to RGB.	Hue for group 2	Red for group 2
Channel 5	Intensity Effects 0 Static 1-63 Fade on, fade off . Variable range, 63 the fastest 64-127 Fade on, snap off. Variable range, 127 the fastest 128-191 Snap on, fade off. Variable range, 191 the fastest. 192-255 Snap on, snap off (Strobe). Variable range, 255 the fastest.	Saturation for group 2	Green for group 2
Channel 6	Intensity Fan 0-255 Variable fan of intensity effect between groups. All units at the same intensity at 0. Alternating units on and off at 255.	Intensity for group 2	Blue for group 2
Channel 7	Hue for group 1	Hue for group 3	Red for group 3
Channel 8	Saturation for group 1	Saturation for group 3	Green for group 3
Channel 9	Intensity for group 1	Intensity for group 3	Blue for group 3
Channel 10	Hue for group 2	Hue for group 4	Red for group 4
Channel 11	Saturation for group 2	Saturation for group 4	Green for group 4
Channel 12	Intensity for group 2	Intensity for group 4	Blue for group 4
Channel 13	Hue for group 3	Hue for group 5	Red for group 5
	...and so on up to group 30		

Total DMX Channels	96 DMX channels	90 DMX channels	90 DMX channels

d. DMX personality mode 7-9

	In modes 7-9 all outputs are grouped as one		
PSU-30 (v2.2)	Mode 7 (9ch) 6FX + HSI	Mode 8 (3ch) HSI	Mode 9 (3ch) RGB (with *Magic Amber)
Channel 1	Colour Speed 0-255 Variable speed of colour scrolling. From static at 0 to maximum at 255.	Hue for group 1	Red for group 1
Channel 2	Colour Fan 0-255 Variable fan of colour within group. All units are the same colour at 0.	Saturation for group 1	Green for group 1
Channel 3	Colour Range 0 Full spectrum 1-255 Variable limit of spectrum for colour scrolling. Single colour at 1, full spectrum at 255.	Intensity for group 1	Blue for group 1
Channel 4	Colour Step 0-255 Variable control of smoothness of colour scrolling. Smoothest is at 0. Most coarse is at 250. Rate will vary with scrolling speed. 255 will override effects and switch to RGB.		
Channel 5	Intensity Effects 0 Static 1-63 Fade on, fade off . Variable range, 63 the fastest 64-127 Fade on, snap off. Variable range, 127 the fastest 128-191 Snap on, fade off. Variable range, 191 the fastest. 192-255 Snap on, snap off (Strobe). Variable range, 255 the fastest.		
Channel 6	Intensity Fan 0-255 Variable fan of intensity effect within group. All units at the same intensity at 0. Alternating units on and off at 255.		
Channel 7	Hue for group 1		
Channel 8	Saturation for group 1		
Channel 9	Intensity for group 1		
Total DMX Channels	9 DMX channels	3 DMX channels	3 DMX channels

e. DMX personality mode 10-11

	In modes 10-11 each cell is a group	
PSU-30 (v2.2)	Mode 10 (480ch) RGBA	Mode 11 (480ch) RGBI (with *Magic Amber)
Channel 1	Red for group 1	Red for group 1
Channel 2	Green for group 1	Green for group 1
Channel 3	Blue for group 1	Blue for group 1
Channel 4	Amber for group 1	Intensity for group 1
Channel 5	Red for group 2	Red for group 2
Channel 6	Green for group 2	Green for group 2
Channel 7	Blue for group 2	Blue for group 2
Channel 8	Amber for group 2	Intensity for group 2
Channel 9	Red for group 3	Red for group 3
Channel 10	Green for group 3	Green for group 3
Channel 11	Blue for group 3	Blue for group 3
Channel 12	Amber for group 3	Intensity for group 3
Channel 13	Red for group 4	Red for group 4
Channel 13	...and so on up to group 120	
	480 DMX channels	480 DMX channels

f. DMX personality mode 12-13

	In modes 12-13 each Color Block DB4 or Color Block 2 fixture (4 cells) is a group	
PSU-30 (v2.2)	Mode 12 (120ch) RGBA	Mode 13 (120ch) RGBI (with *Magic Amber)
Channel 1	Red for group 1	Red for group 1
Channel 2	Green for group 1	Green for group 1
Channel 3	Blue for group 1	Blue for group 1
Channel 4	Amber for group 1	Intensity for group 1
Channel 5	Red for group 2	Red for group 2
Channel 6	Green for group 2	Green for group 2
Channel 7	Blue for group 2	Blue for group 2
Channel 8	Amber for group 2	Intensity for group 2
Channel 9	Red for group 3	Red for group 3
Channel 10	Green for group 3	Green for group 3
Channel 11	Blue for group 3	Blue for group 3
Channel 12	Amber for group 3	Intensity for group 3
Channel 13	Red for group 4	Red for group 4
Channel 13	...and so on up to group 30	
	120 DMX channels	120 DMX channels

g. DMX personality mode 14-15

	In modes 14-15 all PSU-30 outputs are grouped as one	
PSU-30 (v2.2)	Mode 14 (4ch) RGBA	Mode 13 (4ch) RGBI (with *Magic Amber)
Channel 1	Red for group 1	Red for group 1
Channel 2	Green for group 1	Green for group 1
Channel 3	Blue for group 1	Blue for group 1
Channel 4	Amber for group 1	Intensity for group 1
	4 DMX channels	4 DMX channels

h. DMX personality mode 16

	In mode 16 grouping is variable
PSU-05B (v2.2)	Mode 16 (1ch) Look Store
Channel 1	Channel levels and the corresponding Look numbers:

Channel Level (%)	Look	Channel Level (%)	Look	Channel Level (%)	Look
0	OFF	33–35	11	69-71	22
1–2	1	36-38	12	72-74	23
3–5	2	39-42	13	75-78	24
6–9	3	43-45	14	79-81	25
10–11	4	46-48	15	83-85	26
12–15	5	49-51	16	86-88	27
16–19	6	52-54	17	89-91	28
20–22	7	56-58	18	92-94	29
23-25	8	59-61	19	95-97	30
26–27	9	62-64	20	98-100	31
29-32	10	65-68	21		

2.3 Technical Information

a. Specifications

Product code:	CHCBPSU30 (max 30 DB4 or CB2)
Dimensions:	483mm × 368mm × 89mm 19" × 14.5" × 3.5"
Weight:	11.1kg / 24.5lbs
Working Voltage:	100-240VAC 50/60Hz auto-switching
Power consumption:	18A @120VAC; 9A @ 240VAC
Output connector in/out:	XLR4
Sync:	Ethercon RJ45 in and through
Power connector:	Trailing lead
Control:	ANSI E1.11 USITT DMX 512-A
Body color:	Black power coated paint
IP Rating:	IP20
Fuses:	Both live and neutral are fused 110V - 2 x 20A 1.25" ceramic 220V - 2 x 10A 1.25" ceramic
Cooling:	5 x rear mounted fans, ventilation required front and rear
Operating temperature:	0º C to + 40º C
Approvals:	EN55103-1, 55103-2, IEC60950

b. Maintenance

With care the Color Block PSU-30 will require little maintenance. However, as the unit is likely to be used in a stage environment we recommend periodical internal inspection and cleaning of any resulting dust and cracked oil residue. In addition the internal battery will need to be replaced on a regular basis (see following section).

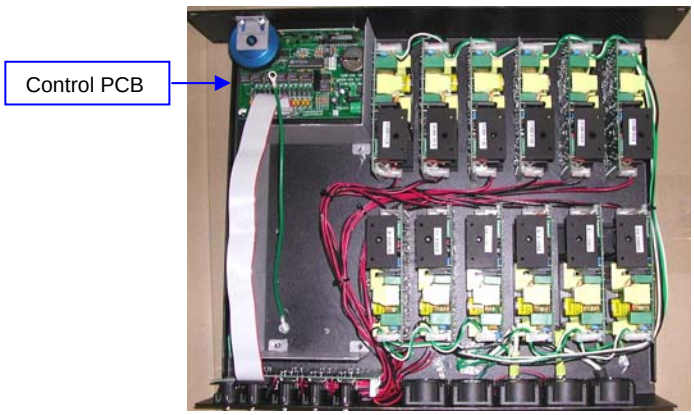
Do not spray liquids on the front or rear panel. If the front enclosure requires cleaning, wipe with a mild detergent on a damp soft cloth.

c. Battery replacement

When the text "Battery not fully charged" appears on the display menu, the battery in the control PCB has expired and needs a replacement.

To replace the battery,

1. Remove the top cover
2. On the control PCB, replace the old battery with a new unit. (See image on page 15)
3. Put back the cover and power cycle the unit.



The CR20/32 Lithium battery should last approximately 5 years from the date the battery was made – note that a 4 year life from date of product sale would not be unexpected when delivery and manufacturing times are allowed for.

Caution: Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the battery manufacturer's instructions and local regulations.

d. Installation

The Color Block PSU-30 must be installed in a 2U rack mounted enclosure and be supported front and rear. Ensure adequate ventilation around the front and rear of the enclosure. Failure to allow adequate ventilation may result in premature failure of the unit.

e. Wiring

Power in, mains voltage

Europe

Live = brown, neutral = blue, earth = green / yellow

North America

Live = black, neutral = white, ground = green

OUT - XLR4

Used to supply power and control data to the Color Block DB4 or Color Block 2 fixtures. Pin 1 = 0VDC, pin 2 = control minus, pin 3 = control plus, pin 4 = +48VDC. The chassis should be ground bonded.

Note: Due to the higher levels of leakage current of the PSU-30 it is important that the XLR4 cables used are manufactured only to the specification detailed above. It is also important that the cables are not coupled or uncoupled whilst the PSU is powered and that the PSU is correctly grounded.

DMX - XLR5

Pin 1 = ground/shield, pin 2 = control minus, pin 3 = control plus, pins 4 and 5 are not used.

SYNC - RJ45

Used to synchronise the FX running on multiple PSU-30s. A straight wired RJ45 patch cable is suitable to connect units (not a crossover cable).

Note: The SYNC connector on the PSU-30 is not using Ethernet.